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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,278	06/19/2001	Koji Sakai	1248-0544P-SP	9443
2292	7590	03/24/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HO, DUC CHI	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,278

Applicant(s)

SAKAI ET AL

Examiner

Duc C. Ho

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-21 is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1, 15, and 18 are rejected under 35 U.S.C. 101.

Claim 1 is rejected under 35 U.S.C. 101 because the recitation "when the information waveform signal consecutively repeats a single pattern, a different pattern is inserted between the same patterns before transmitting the single patterns" in lines 4-5 per se, does not appear to be a process, machine, manufacture, or composition of matter. Further, the claimed invention is directed to non-statutory subject matter by claiming "signal" claim. The same remark applies to claims 15, and 18.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-8, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Gulick et al. (US 5,048,012), hereinafter referred to as Gulick.

Regarding claim 1, Gulick discloses data link controller with flexible multiplexer.
When the information waveform signal consecutively repeats a single pattern

(the link provided by DLC 52-fig. 2 is said to be idle when frames are not being transmitted. In other words, the link may be said to be occupied by an idling waveform or repeating an idling waveform, see col. 7, lines 52-62, fig. 2-3), *a different pattern is inserted between the same patterns before transmitting the single patterns* (when the link is idle, the DLC transmitter 102-fig. 3 can be programmed by microprocessor 18-fig.3 to send an all ONEs pattern, which is referred to as Mark Idle(MI) for transmission of the idle status).

Regarding claim 2, the Data link controllers (DLCs) are used in integrated services digital networks (ISDNs) to provide a high-speed 192 kilo-bit per second (KBPS) serial interface to a telecommunications network.

Regarding claim 3, the microprocessor 18-fig.3 can be programmed to send the MI at random interval.

Regarding claim 4, the microprocessor 18-fig.3 can be programmed to send the MI at fixed interval.

Regarding claim 5, the microprocessor 18-fig.3 could select another idling pattern, i.e. Flag Idle (FI), see col. 7, lines 52-62.

Regarding claim 6, the MI pattern is considered as a code indicative of an idling state on the link.

Regarding claim 7, the FI pattern is a code different from the MI code representing the idling status.

Regarding claim 8, the MI pattern is considered as a code indicative of an idling state on the link.

Regarding claim 12, when the link is inherently occupied by an idling waveform, the MI pattern, inherently obtained the same transmission timing as that of an idling waveform representing the idling information, is used for transmission on that link, see col. 7, lines 52-62, fig. 2-3.

Regarding claim 14, the system of Gulick is capable of utilizing an optical signal.

Regarding claim 18, this claim has similar limitations as claim 1. Therefore, it is rejected under Gulick for the same reasons set forth in the rejection of claim 1.

Allowable Subject Matter

5. Claims 19-21 are allowed.
6. Claim 15 is rejected but would be allowable if rewritten to overcome the 35 U.S.C. 101 rejections as set forth above.
7. Claims 9-11, and 13 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if the base claim has overcome the 35 U.S.C. 101 rejection as set forth above.
8. Claims 16-17 13 are objected to as being independent upon a rejected base claim, but would be allowable if the base claim has overcome the 35 U.S.C. 101 rejection as set forth above.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

A handwritten signature in black ink, appearing to read 'Duc Ho', is written over the printed name.

Duc Ho

03-21-06